

## **Work Plan Components to Meet IRWM Standards**

### **Task 1 Conduct Monthly Stakeholder and Policy Committee Meetings**

This task includes the preparation for, conduct of, and facilitation of monthly meetings of both the Policy and Stakeholders meetings. While the Policy meeting is conducted as a teleconference, the Stakeholders meetings take place at the BWD headquarters in Borrego Springs. Agendas are prepared and distributive in advance to each previous and current participant. Telephone conferencing is acceptable for the Tribal entities which have not been in attendance at any of the meetings.

#### Costs related to this task

Total Cost: \$12,100

Preparation of materials (agendas, notes) and meeting facilitation by consultant:  
20 hours/month @ 125/hr = \$2,500 per meeting x 4 meetings until January of 2011 = \$10,000

BWD staffing @ 4hrs/mtg. x 4 mtgs. x \$100/hr = \$1,600

Administrative Cost by BWD staff (attendance and meeting minutes preparation)  
\$500

### **Task 2 Complete (revise, edit and fill gaps) of Sections 1- 6 of the IRWM Plan**

While Plan Sections 1-6 (Governance, Description of Region, Goals, Objectives and Targets, Integration of Water Management Strategies, Project Review Process, Impacts and Benefits) have been completed in some detail and reviewed by both committees, there remain a number of gaps in the information needed to fully describe the Region's physical and institutional make up. For example, the amount and percentage of various land ownerships is unknown.

#### Costs related to this task

Total Cost: \$3,500

Consultant 20 hrs @ \$125/h = \$2,500

BWD staffing @ 5hrs x \$100/hr = \$500

Administrative Cost by BWD staff = \$500

### **Task 3 Conduct Performance and Monitoring**

The Section of the Draft Plan concerning the monitoring of the performance of the Plan has not been written. However, there are portions of the Draft Plan that relate specifically to this issue. For example, Section 3 establishes quantitative performance targets for each of the six objectives selected by the Stakeholders to accomplish the four goals established for the Region. A total of nearly 30 quantitative performance targets are established in the Draft Plan. In this task, discussions with the Stakeholders and the RWMG will be conducted to establish the following:

- Who in the RWMG, or possibly a participant in the Stakeholders group, that is responsible for monitoring the progress in meeting the specific targets and the frequency of evaluating the performance in meeting the targets. Flood management targets may more appropriately be assigned to the County's Flood Control Agency, for example.
- The specific performance targets in Section 3 will be inputted into the Region's Data Management System with timely 'reminders' of upcoming target due dates.

The Region's DMS will be maintained by BWD, but will allow access from authorized personnel, including the RWMG.

- The DMS will also contain step by step progressive activities necessary to complete each Implementation Project. Completion dates for each step will also be included in the DMS. A Gantt chart system will be used to track each project. The system will be queried and updated monthly and provide timely progress reports on all Implementation Projects.
- It is expected that the RWMG and Stakeholders will find that as new data or as unforeseen externalities surface, that the RMSs, plan objectives, etc. may require modification or revision. 'Lessons Learned' findings sessions will be conducted periodically to optimize the performance of the process.

Costs related to this task

Total Cost: \$22,700

Consultant to develop DMS and link to GIS 100 hrs @ \$125/h = \$12,500

Data Input by BWD staff: 60 hrs @ \$120/hr = \$7,200

BWD staffing @ 20hrs x \$100/hr = \$2,000

BWD Administrative Costs \$1,000

#### **Task 4 Prepare a Data Management Plan**

Data collected thus far has only amounted to prior reports, memos, letters and minutes of meetings. These are routinely stored in the BWD files and entered into the BWD GIS.

Raw data such as groundwater levels, water quality, pumping tests, etc when collected are also stored in the BWD GIS. The BWD GIS was developed in conjunction with the development of numeric model currently being formulated by the US Geological Survey and covers only the Borrego Valley area. All data collected on water level measurements, water quality, GPS surveys, reports and any other relevant data are stored within this GIS.

Currently, BWD staff and consultants are working to integrate the Park's extensive GIS, which covers a great deal of the Region, with the BWD GIS. The next step is the incorporation of portions of the County of San Diego's GIS into a Regional GIS.

The final ABD IRWM data management system will be developed with common protocols for gathering data in a consistent manner and that can be shared with in the RWMG. It will be developed so that it is understandable to the members of the Stakeholders group. The DMS will be structured so that it is compatible with the several State databases mentioned in the IRWM Standards for Data Management.

Costs:

Costs related to this task

Total Cost: \$54,000

Consultant coordination 12 hrs @ \$125/h = \$1,500

GIS Consultant \$50,000

BWD Administrative Costs = \$2,500

### **Task 5 Identify Financing Opportunities for Implementation Projects**

One of the implementation projects that are currently being implemented is partially financed through federal funding. Applications and requests have been made for federal assistance on other projects. State funding, through a non-IRWM funding program may also be obtained. These external existing and potential funding opportunities are identified in Task 14 of this work plan for each of the Implementation Projects.

Local financing from BWD reserves, current rate payer revenues or potential bond issues are all possibilities. These sources are also listed in Task 14.

Another issue that needs to be addressed in this task is the continued fund sources will be derived for projects that require annual O&M expenditures.

#### Costs related to this task

Total Cost: \$8,500

Consultant coordination 12 hrs @ \$125/h = \$1,500

Bond Council assistance \$4,000

BWD staffing @ 25hrs x \$100/hr = \$2,500

BWD Administrative Costs \$500

### **Task 6 Technical Analysis**

This task deals with the soundness of the technical information concerning the water management needs embedded in the Plan. As shown in Table 2-1 of the draft plan neither of the two participating water purveyors expect a net increase in their water needs. The Canebrake CWD has no opportunity for growth as it is completely surrounded by the Park or federally owned lands.

The more complex issue is the BWD. The current situation, as fully described in Section 4.31 of the Draft Plan, the BWD and County of San Diego will not allow an increase in water use without a corresponding reduction in existing water use from the basin, such as the fallowing of agricultural lands. There are a number of previously approved lots that could be developed, but only after appropriate mitigation is obtained.

The off-setting mitigation requirement by both the County and the BWD is based on a continued lowering of the water levels in the groundwater basin. This water level decline is the result of a long term overdraft that has been documented through many years of groundwater level measurements by the County, State, federal and local data collection efforts. Several studies by the State (DWR), the Bureau of Reclamation and the US Geological Survey have estimated the available water supply from the runoff from area surrounding the basin and estimated the amounts of groundwater extractions. All of these are in agreement that a substantial overdraft exists.

Two major issues face the area: While no new net water use is prohibited, there is still the issue of a continuing overdraft. The elimination of the current overdraft would require a substantial reduction in groundwater extractions (presumably a combination of fallowing of agricultural lands and the importation of water from nearby groundwater basins, for example.)

The US Geological Survey recently announced that the main producing aquifer in the Borrego Valley Basin has an expected useful life of only 50 years. Thus, a solution to the overdraft must be found in the near term in order to avoid a severe water shortage situation that would disrupt or destroy the local economy. The technical data being

developed to support this conclusion is a numeric model being prepared by the USGS. The development is near the end of the second year of a three year project. The model will be useful in developing groundwater management options, such as importing water for recharge, reducing agricultural water use, etc.

If the overdraft were mitigated, could the substantial available dewatered space in the aquifer be utilized as a water banking operation (conjunctive use)? Groundwater banking is becoming an important water management tool that can help supplement the State's diminishing water supplies from environmental regulations and climate change. The model will be useful in developing groundwater management options relating to water banking. Thus, the soundness of the technical information will be heavily weighted towards the model development by an independent and well respected agency, the US Geological Survey.

Costs related to this task

Total Cost: \$220,700

Consultant Management of Model Development 32 hrs @ \$125/h = \$4,000

Attendance at Quarterly Model Meetings – Consultant 4 meetings at \$1,000/meeting = \$4,000

USGS Model Development final year - \$202,700

BWD Administrative Costs = \$10,000

### **Task 7 Describe IRWM Process and its Relation to Local Land Use Planning**

As indicated in Section 1 of the Draft Plan, there are no incorporated communities in the Region and that all land use decisions regarding private land uses are made with the County of San Diego. Regarding the Borrego Springs area; a Borrego Springs Community Plan has been prepared by the local community and adopted as an integral part of the County of San Diego's General Plan update of July 1, 2009. This plan includes policy plans specifically created to address the issues, characteristics, and visions of the community. The Community Plan provides framework for addressing the critical issues and concerns that are unique to Borrego and are not reflected in the broader policies of the General Plan and is consistent with all other parts of the County's General Plan.

The Plan's policies require that development be comparable to, or transition with, existing development to ensure that new development "fits" with the community and enhances the community's vision. Also indicated earlier, the County has adopted 'groundwater preservation' ordinance that requires a one for one mitigation for new water use. This ordinance is consistent with a similar policy of the BWD, which also requires the same amount of mitigation, but in addition to that of the County's requirement. Thus the local and regional plans are consistent both in development and water use mitigation. And, in fact, demonstrate a clear linkage between land use planning and water resource management.

BWD has also adopted a Groundwater Management Plan (2002). This plan contains goals and objectives that do not conflict with the County plans.

It is noted that nearly all of the Region's lands are under State and Federal jurisdiction. Some of the Implementation Projects are expected to take place on Park lands. These projects are consistent with the Parks objectives of improving water supplies at its campgrounds and the removal of invasive species.

The effort envisioned in this task to the continued dialogue between the RWMG, specifically BWD, with the County, the Park and the other federal land holders to ensure continued cooperation in implementing the needed projects for fulfilling the goals of the IRWM. Quarterly meetings with all major land owners are proposed.

Costs related to this task

Total Cost: \$9,000

Facilitated quarterly meetings for two years: 8 hrs/meeting x 4/yr x 2yrs @

\$125/hr = \$8,000

BWD Administrative Costs = \$1,000

### **Task 8 Identify Region and Local and Regional Water Planning Relationships**

The BWD water planning efforts have been incorporated into the Draft Plan. Further, there are no regional water plans. The County has adopted an ordinance that mitigates for new water uses in the Borrego Valley. Close coordination with the County on water management issues for the Borrego Valley as well as for the Region will be a continuing effort.

A component of this task is to meet with County officials in an attempt to encourage the County to potentially coordinate water needs of the Region with those of the adjoining counties. Adjoining counties have water supply and disposal issues that could be assist the eastern portion of San Diego County with its limited water supplies.

Costs related to this task

Total Cost: \$5,000

Facilitated meetings 16 hrs/meeting @ \$125/hr = \$2,000

Prepare Section in Plan 8hrs @ \$125 = \$1,000

BWD staffing @ 15hrs x \$100/hr = \$1,500

BWD Administrative Costs = \$500

### **Task 9 Describe Stakeholder Involvement**

This program standard has already been discussed and no additional costs are associated the completion of this effort.

### **Task 10 Coordination**

This task is designed to ensure that all participating agencies and Stakeholders are informed and kept abreast of the process. This is being accomplished through several previously described tasks. However, it is important to keep informed of the activities of the adjoining Regions work with a view of possibly combining solutions to local issues with a regional solution. Thus, attendance at the adjoining Region's meetings is desirable. It is envisioned that BWD or other members of the ABD Region participate in these meeting.

Costs related to this task

Total Cost: \$19,200

Attend quarterly meetings of adjoining Regions

BWD or others for a two year period 3 regions x 4/yr x 2 yrs x 8 hr/mtg @

\$100/hr = \$19,200

**Task 11 Describe Climate Change Impacts and Responses**

This task involves the review of all literature regarding Climate Change and Green House Gas emissions. This was briefly discussed in Section 1.2.8 of the Background Section of this application. This task envisioned a thorough literature review with respect to the potential impacts on the Region's water resources and ecological systems. Particular emphasis will be placed on the opportunities to respond to the changes and how to reduce GHG emissions.

Costs related to this task

Total Cost: \$6,500

Review of Literature and Report Preparation 40 hrs @ \$125/h = \$5,000

BWD staffing @ 10hrs x \$100/hr = \$1,000

BWD Administrative Costs \$500

**Task 12 Prepare Final Plan**

This task will be somewhat cumbersome due to the many reviewers that will desire to review and comment.

Costs related to this task

Total Cost: \$26,500

Preparation of 2 draft reports and respond to comments 120 hrs @ \$125/h = \$15,000

Attend 2 meetings for presentation and discussion 2 mtg (32hrs at \$125/hr) @ \$2,000/mtg = \$4,000

Preparation of Final Report 20 hrs @ \$125/h = \$2,500

BWD staffing @ 45hrs x \$100/hr = \$4,500

BWD Administrative Costs \$500

**Task 13 Reimbursement of IRWM costs from September 2008 thru September, 2010**Costs related to this task

Total Cost: \$292,832

Costs related to this task:

Costs from September 2008 to September 30, 2010

Technical Analysis Costs= \$185,232

Consultant Costs=\$93,226

BWD Administrative Costs = \$14,374